



**U.S. Department of Energy
Technical Qualification Program**

Technical Training Topical Area

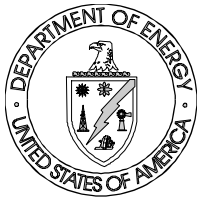
Study Guide

<p>Appendix A Glossary</p>

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Analysis	The phase of the systematic approach to training (SAT) that ensures training activities are oriented to job requirements by identifying the specific tasks involved in a given job. Training requirements are determined by analyzing the job and its component tasks. Organizational needs are also assessed to determine the resources required to support identified training requirements.
Certification	The process by which contractor facility management provides written endorsement of the satisfactory achievement of qualification of a person for a position.
Competencies	Knowledge, skills, and abilities individuals must possess to produce results that meet stated quality standards. Listed below are the competencies that the task force working on the development of this guide determined were the most important for training managers within the DOE system to possess.
Design	The phase of SAT that results in the development of performance objectives, organization of the objectives into meaningful units and a sequence, and the selection of instructional methods and media to meet the objectives.
Development	The phase results in the creation of lesson plans(s), lesson materials for the trainer, and lesson materials for the trainee.
Enabling Learning Objective	A learning objective that supports the terminal learning objective.
Evaluation	The SAT phase that is the critical feedback loop to ensure the training meets its objectives. Feedback from instructors, trainees, evaluators, and supervisors is reviewed for its potential refinement of future training. Evaluation is a continuing action that occurs throughout the entire process and beyond. Evaluation results are translated into change actions or recommendations based on different criteria such as adequacy of content, tests, presentation, or documentation, and post-training job performance.
Implementation	The phase of SAT that consists of resource allocation, planning, and scheduling, as well as the actual conduct of training. Resource allocation includes assigning instruction and support staff and scheduling training in facilities.



Individual Training Records	Correspondence, memoranda, reports, and other documents relating to the availability of training and employee participation in training programs, or relating to qualification or certification to perform certain tasks, engage in certain employment or occupations, or conduct certain activities.
Individualized Instruction	Instruction in which the pace of training is controlled by the trainee and guided by the program materials. Individualized instruction does not require the full-time presence of an instructor. Students study on their own and learn at their own pace.
Instructional Media	A means of communicating an instructional message e.g., film, video, audiotape, photograph, print materials, etc.
Instructional Methods	Ways of achieving different learning outcomes under different instructional conditions. Methods include presentations, discussions, exercises, case studies, simulations, etc.
Instructor Qualification	The process of determining and verifying that individuals meet the instructional and technical competence qualification criteria for a specific instructor qualification level.
Instructor Training	Training designed to develop or improve the skills of individuals who design, develop, present, or evaluate classroom, laboratory, OJT, or simulator instruction.
Job Aids	Job aids display short narrative and/or graphic instruction that extend the user's skills, particularly the skills to remember while performing the job.
Job Analysis	A systematic method used in obtaining a detailed listing of the tasks of a specific job.
Knowledge	Information acquired and stored in memory. Knowledge can be classified as facts, procedures, concepts, or principles that guide performance.
Learning Objective	A statement that specifies measurable behavior that a trainee should exhibit after instruction, including the conditions and standards for performance.
Lesson Plan	An instructor's document that outlines instructor and trainee activities, learning objectives, lesson content, and resources necessary for the consistent conduct of training.



Lesson Plan	A document created by a trainer that outlines learning objectives, trainer and trainee activities, lesson content, and resources necessary for the conduct of training.
Needs Analysis	The study of performance and the environment that influences it in order to make effective recommendations and decisions about closing the gap between actual and desired performance. Sometimes the recommendations involve training, and other times they do not. Needs analysis is also referred to as front-end analysis.
Objectives	Objectives specify precisely what behavior is to be exhibited, the conditions under which behavior will be accomplished, and the minimum standard of performance.
On-the-Job Training (OJT)	OJT is formal training that is conducted and evaluated in the work environment.
Oral Examination	An oral evaluation of a trainee's level of knowledge where a trainee answers questions related to a knowledge requirement in the applicable learning objectives, tasks, or qualification standard.
Performance-Based Training (PBT)	An outcome of the systematic approach to training that is based on tasks and related knowledge and skills required for competent job performance.
Performance Measures (PMs)	Self-established metrics or standards against which management determines status, rate of change, and degree of achievement. They are normally presented in the form of trend charts.
Performance Objectives	Learning objectives that describe what the trainees will know and be able to do as a result of training. Performance objectives outline the task to be performed, how the task is to be performed, and how well the learner must perform the task.
Performance Test	A practical (hands-on) demonstration by the trainee of the knowledge and skills required to perform a task that is evaluated by a qualified instructor. Performance tests may be used to evaluate the competency of any employee (e.g., craft personnel, radiation workers, facility operators, maintenance personnel, and security personnel).



Program	An organized set of activities directed toward a common purpose, or goal undertaken or proposed in support of an assigned mission area. It is characterized by a strategy for accomplishing a definite objective(s), which identifies the means of accomplishment, particularly in quantitative terms, with respect to manpower, materials, and facilities requirements.
Qualification	The process by which an individual acquires the education, experience, training, and/or any special requirements (e.g., medical examinations) necessary to perform in a basic job description and its attendant functions.
Qualification Program	Those formal training and evaluation activities administered by training staff, management, and by line management to a trainee. The activities are designed for the trainee to gain proficiency and competence in a skill and knowledge area, such that the trainee graduate can work independently.
Qualification Standard	A document defining the required knowledge and skills (above entry level) for a given job regarding specific learning objectives, procedures, tasks, systems, components, and theory. The standard also specifies prerequisite knowledge, performance, and examination requirements, level of accomplishment for practical requirements, and reference training material.
Self-Study	Includes any of a number of forms of instruction in which the pace of training is controlled by the trainee and guided by the program materials. Self-studies do not require the full-time presence of an instructor.
Skills	Those qualities or characteristics of individuals that are learned through a combination of acquired knowledge, training, experience, and ability.
Subject Matter Expert (SME)	An individual qualified (or previously qualified) and experienced in performing a particular task. A subject matter expert may also be an individual who by education, training, and/or experience is a recognized expert on a particular subject, topic, or system.
Systems Approach	Approaching a problem as a group of parts or phases that function together and work toward a solution.



**Systematic
Approach to
Training (SAT)**

An approach to training that includes the following basic elements: (1) a systematic analysis of the jobs to be performed, (2) learning objectives derived from the analysis that describe desired performance after training, (3) training design and implementation based on the learning objectives, (4) evaluation of student mastery of the objectives during training, and (5) evaluation and revision of the training based on the performance of trained personnel in the job setting.

Task

A well-defined unit of work having an identifiable beginning and end, with two or more activities. A task is a measurable component of the duties and responsibilities of a specific job.

Task Analysis

The systematic process of examining a task to identify skills, knowledge, and/or abilities required for successful task performance.

**Terminal Learning
Objective**

A learning objective that clearly states the measurable performance the trainee will be able to demonstrate, at the conclusion of training including the conditions and standards of performance.

Training

Instruction designed to develop or improve job performance of a worker.

Training Program

A planned organized sequence of activities designed to prepare individuals to perform their jobs, to meet a specific position or classification need, and to maintain or improve their performance on the job.

Training Setting

The environment in which training is conducted. Examples of training settings include classroom, laboratory, OJT, and self-paced instruction.

Validation

The process of determining if a product or training session meets its intended use or purpose as designed.